

Amendments to the Specification:

Please replace Paragraph [0025] with the following amended paragraph:

[0025] FIG. 42 shows an example of mirror memory mechanism.

Please replace Paragraph [0036] with the following amended paragraph:

[0036] FIG. 23 illustrates a write operation requiring a change of active physical area for this first realisation.

Please replace Paragraph [0039] with the following amended paragraph:

[0039] Modes of realisation of the write algorithm for an area (section 2) are described below, referring to FIGS. ~~4a to 4e~~ 5a to 5c which illustrate the various comparison operations. The active physical area on the left contains in bold the bits to be modified. The new active physical area (the same as the old area in FIG. ~~4a~~ 5a) and the bits actually programmed, in bold, are shown on the right.

Please replace Paragraph [0042] with the following amended paragraph:

[0042] If the two contents are identical, nothing is written and the active physical area remains the same (FIG. ~~4a~~ 5a).

Please replace Paragraph [0043] with the following amended paragraph:

[0043] If only bit programming operations are required (i.e. switch from `0` to `1`), the active area is not changed and the corresponding bits are programmed in the current area (FIG. ~~4b~~ 5b).

Please replace Paragraph [0044] with the following amended paragraph:

[0044] Otherwise, the current area is read and masked by the portion to be written, then everything is programmed in a new active area (FIG. 4e 5c).

Please replace Paragraph [0046] with the following amended paragraph:

[0046] In a variant of the method (FIG. 4e 5c) described above, the area is not entirely programmed, but just the portion which is actually different (greyed in the figure). Although this method involves more complex management, it may be better either because there is a significant gain when programming the non volatile memory or because the bit programming time is very high.

Please replace Paragraph [0047] with the following amended paragraph:

[0047] Modes of realisation of the regeneration of the physical areas (section 3) referring to FIG. 5 6 are described below.

Please replace Paragraph [0049] with the following amended paragraph:

[0049] A purely software mechanism to erase the areas (FIG. 5 6) consists in copying the active physical area (the "mirror") in a buffer area, then in erasing all mirror physical areas and lastly in copying the buffer into the first physical area available. This mechanism is illustrated in the following diagram.

Please replace Paragraph [0051] with the following amended paragraph:

[0051] The realisation on this memory assumes that the logical area has at least one "mirror" area in each bank. The bank containing the active area is used for the programming and the read, whilst the mirror areas in the other bank are completely erased (if possible) at the same time. The system changes active bank when all the mirror areas of the bank have been used. FIGS. ~~6a to 6e~~ 7a to 7c illustrate this realisation.

Please replace Paragraph [0054] with the following amended paragraph:

[0054] On FIG. ~~6e~~ 7c, when A reaches saturation, B becomes the active bank and the system erases A in parallel.